

ABB BALDOR RELIANCE III

Customer information packet

P36G4668

75HP, 1780RPM, 3PH, 60HZ, 365TC, A36056M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	365TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	87.000 A @ 460.0 V 174.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	87.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 4 AWG


Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A36WG0731
Layout	611740-003-SH1
Eff. date	03-03-2021
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	10-19-2010

Motor Standards	NEMA
Motor Type	A36056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.44 IN
Power Factor	86
Pulley End Bearing Type	Ball
Pulley Face Code	P-Base
Service Factor	1.15
Shaft Diameter	2.374 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2531L									
CAT.NO.		SPEC NO.	P36G4668			FRAME	365TC		
HP	75	PHASE	3	DESIGN	B	TYPE	P		
RPM	1780	HZ	60	AMB	40	SF	1.15		
VOLTS	230/460	DUTY	CONT		INSUL.CLASS	F			
AMPS	174/87	ENCL	TEFC	CODE	G				
DRIVE END BEARING	65BC03J30X		NEMA-NOM-EFFICIENCY			94.1			
OPP D.E. BEARING	65BC03J30X								
	SUIT FOR 208V AT 190 AMPS				NOT FOR USE IN THE US				
SER.NO.		MOTOR WEIGHT							

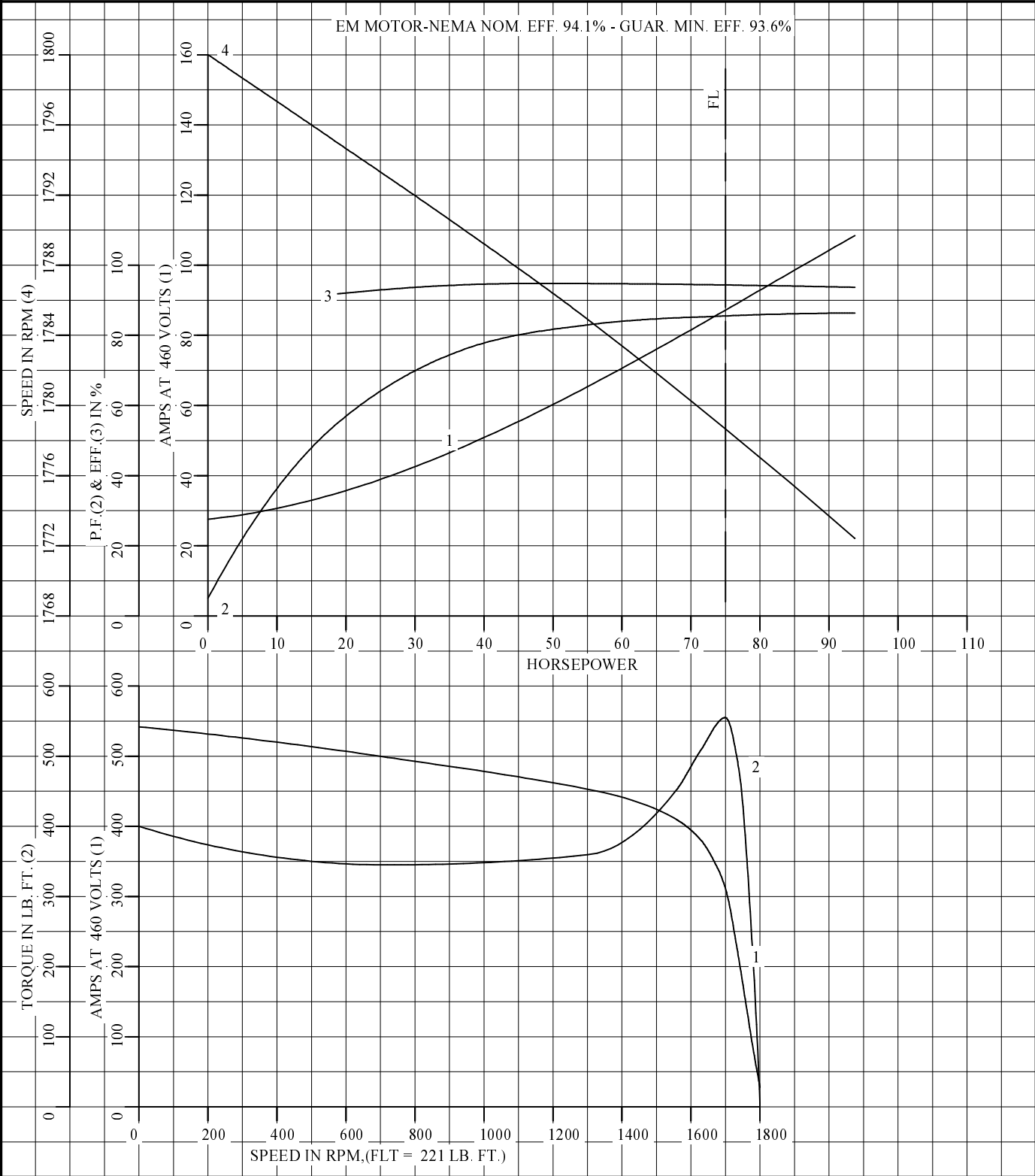
REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	365TC	75	P	3/60	1780	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
174/87	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
492460	418141038ME	---	---	.0229/.0919		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	27.6	1800	5.06	0	
1/4	18.8	34.8	1795	55.0	91.8	
2/4	37.5	48.8	1790	76.3	94.5	
3/4	56.2	66.8	1785	83.2	94.7	
4/4	75.0	87.0	1779	85.5	94.4	
5/4	93.8	109	1772	86.3	93.7	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	181	400	542	
PULL UP		720	156	345	498	
BREAKDOWN		1700	251	555	311	
FULL LOAD		1779	100	221	87.0	
<p>AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE</p> <p>REMARKS: TYPICAL DATA EM MOTOR-NEMA NOM. EFF. 94.1% - GUAR. MIN. EFF. 93.6%</p>						
		DR. BY <u>D. F. DUNN</u> CK. BY <u>D. M. BYRD</u> APP. BY <u>D. M. BYRD</u> DATE <u>07-29-93</u>		A-C MOTOR PERFORMANCE A36WG0731-R001 DATA		
		ISSUE DATE 12/15/10				

FRAME 365TC
HP 75
TYPE P
PHASE/HERTZ 3/60

RPM 1780
VOLTS 230/460
AMPS 174/87
DUTY CONT
AMB °C/INSUL 40/F

NEMA DESIGN B
CODE LETTER G
ENCLOSURE TEFC
E/S 492460

TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25 °C .0229/.0919
OHMS (BETWEEN LINES)



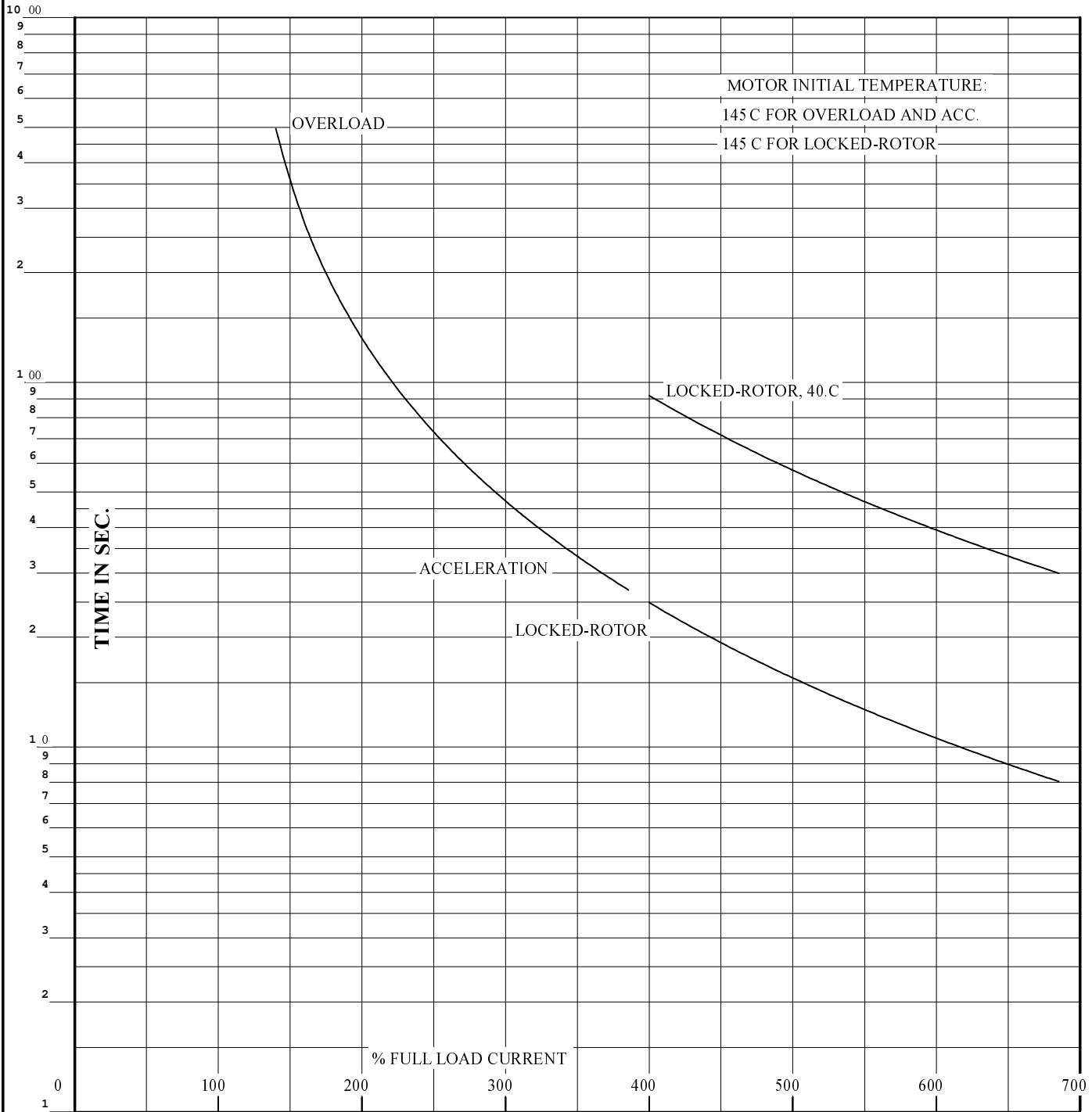
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY D F DUNN
CK. BY D M BYRD
APP. BY D M BYRD
DATE 07-29-93

**A-C MOTOR
PERFORMANCE CURVES** A36WG0731-R001
ISSUE DATE 12/15/10

REL. S.O.	RPM 1780	S.F. 1.15	ROTOR 418141038ME
FRAME 365TC	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 75	AMPS 174/87	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0229 / .0919
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 492460	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: EM MOTOR-NEMA NOM. EFF. 94.1% - GUAR. MIN. EFF. 93.6%

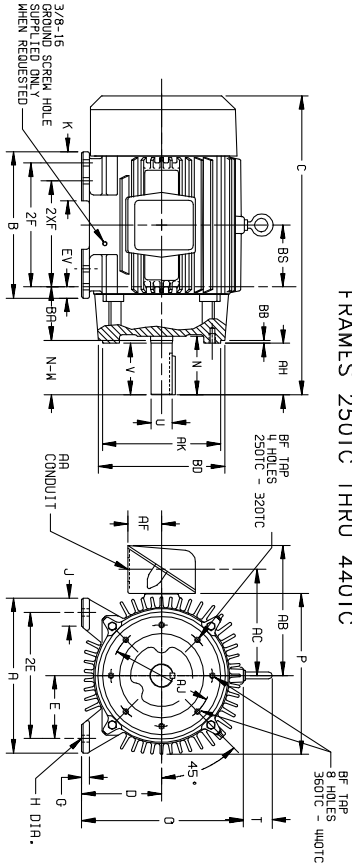
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY	D. F. DUNN
CK. BY	D. M. BYRD
APP. BY	D. M. BYRD
DATE	07-29-93

**A-C MOTOR
PERFORMANCE CURVES** A36WG0731-R001
ISSUE DATE 12/15/10

DUTY MASTER ALTERNATING CURRENT MOTORS
 ENCLOSURE: TOTALLY ENCLOSED SQUIRREL-CAGE INDUCTION COOLING: FAN COOLED
 MOUNTING: FOOT, NEMA "C" FACE FRAMES 250TC THRU 440TC



DIMENSIONS ARE IN INCHES. SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

FRAME	A	D(2)	E	G	H	J	K	EV	O	P	T	STEEL TERMINAL BOX								MIN. TYP. DEPTH	AL	AK
												AA	AB	AC	AF	BA	BB	BD	BF			
254TC-289TC	12.50	6.25	5.00	.75	.56	2.50	---	1.00	13.25	5.44	1-1/4	10.75	8.75	2.50	4.75	2.50	9.00	1/2-13	.75	9.00	10.500	
294TC-289TC	13.75	7.00	5.50	.75	.56	2.50	---	1.00	14.75	14.88	2.44	1-1/2	12.75	10.00	3.19	4.75	2.50	11.25	1/2-13	.75	9.00	10.500
324TC-289TC	15.50	8.00	6.25	.88	.69	2.75	4.50	1.38	16.69	17.00	2.44	2	13.19	11.44	4.25	5.25	2.50	13.12	5/8-11	.94	11.00	12.500
364TC-365TC	17.00	9.00	7.00	.88	.69	2.75	3.88	1.38	18.50	19.50	2.94	3	18.06	14.00	5.38	5.88	2.50	13.00	5/8-11	.94	11.00	12.500
404TC-405TC	19.00	10.00	8.00	1.12	.81	3.25	4.62	1.13	21.31	22.50	2.94	3	19.31	15.25	5.38	6.62	2.50	13.12	5/8-11	.94	11.00	12.500
444TC-445TC	21.00	11.00	9.00	1.12	.81	3.25	5.25	1.25	23.38	25.25	3.25	3	23.38	18.12	6.50	7.50	2.50	16.75	5/8-11	.94	14.00	16.000

FRAME	SIZE	C	BS	B	ZF	N	AH	SHAFT AND KEY		WGT (LBS.)			
								V	U(3)				
254TC	25.06	5.00	12.00	---	8.25	4.06	3.75	4.00	1.625	3.75	2.88	3.75	
294TC	27.44	5.50	12.00	10.00	---	4.06	3.75	4.00	1.625	3.75	2.88	3.75	
324TC	27.44	6.50	13.00	---	9.50	5.00	4.38	4.62	1.875	4.38	5.00	3.25	4.45
364TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45
404TC	27.44	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45
444TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45
289TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45
324TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45
364TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45
404TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45
444TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45
324TC	30.44	6.00	14.75	12.00	---	4.12	3.50	3.75	1.875	3.50	5.00	2.00	5.95
364TC	30.44	6.00	14.75	12.00	---	4.12	3.50	3.75	1.875	3.50	5.00	2.00	5.95
404TC	33.44	6.12	15.00	---	11.25	6.25	5.62	5.88	2.375	5.62	6.25	4.25	8.15
444TC	33.44	6.12	15.00	---	11.25	6.25	5.62	5.88	2.375	5.62	6.25	4.25	8.15
364TC	31.31	6.12	15.00	---	12.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	8.09
365TC	31.31	6.12	15.00	---	12.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	8.09
404TC	31.31	6.12	15.00	---	12.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	8.09
405TC	31.31	6.12	15.00	---	12.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	8.09
444TC	31.31	6.12	15.00	---	12.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	8.09
404TC	38.31	6.88	16.00	---	12.25	7.50	7.00	7.25	2.875	7.00	7.50	5.82	11.65
405TC	38.31	6.88	16.00	---	12.25	7.50	7.00	7.25	2.875	7.00	7.50	5.82	11.65
444TC	38.31	6.88	16.00	---	12.25	7.50	7.00	7.25	2.875	7.00	7.50	5.82	11.65
405TC	38.31	6.88	16.00	---	12.25	7.50	7.00	7.25	2.875	7.00	7.50	5.82	11.65
444TC	35.31	6.88	16.00	---	13.75	4.50	4.00	4.25	2.125	4.00	5.00	2.75	11.96
445TC	40.88	8.25	19.00	---	14.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	16.08
446TC	44.62	8.25	19.00	---	14.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	16.08
447TC	44.62	8.25	19.00	---	14.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	16.08
448TC	44.62	8.25	19.00	---	14.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	16.08
449TC	40.88	8.25	19.00	---	16.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	17.98
450TC	40.88	8.25	19.00	---	16.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	17.98

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE. CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1, W-4-W-5-W-7, OR C-1 MOUNTING IS SPECIFIED.
- (2) "D" VARIES [250TC - 320TC +.00, -.03] [360TC - 440TC +.00, -.06]. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- (3) "U" VARIES [625 AND LARGER +.000, -.001]. MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .002 T.I.R. UP TO AND INCLUDING 1.625 DIA. AND .003 T.I.R. 1.625 DIA. TO 5 INCH DIA.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING. FACE RUNOUT AND [250TC - 280TC INCL. .004 MAX. T.I.R. ECCENTRICITY] [320TC - 440TC INCL. .007 MAX. T.I.R.]
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING. FACE RUNOUT AND [250TC - 280TC INCL. .004 MAX. T.I.R. ECCENTRICITY] [320TC - 440TC INCL. .007 MAX. T.I.R.]
- (6) "K" VARIES [250TC - 280TC +.000, -.003] [320TC - 440TC +.000, -.005]
- (7) "N-W" VARIES +.00, -.25

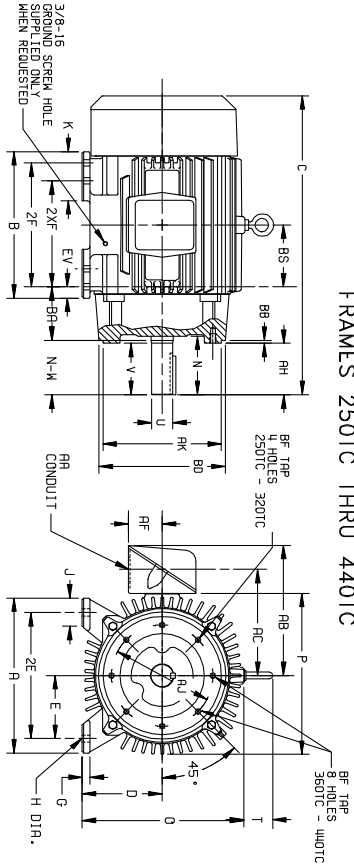
FRAME: _____ TYPE: _____ CERTIFIED FOR: _____
 ORDER: _____ ITEM: _____ HP: _____ RPM: _____ PH: _____ HZ: _____ VOLTS: _____
 RELIANCE SALES ORDER: _____ APPROVED BY: _____ DATE: _____

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC:	REMOVEING TITLE BLOCK	TDR: 000000441900
FILE: LTR: A	VERSION: 01	BY: RAGRKH
FILE: \RAG\00003\380	REVISED: 09:15:38 08/28/2007	
MTL: -		

Baldor • Dodge • Reliance
 DIM SHEET 250TC THRU 440TC

DUTY MASTER ALTERNATING CURRENT MOTORS
 SQUIRREL-CAGE INDUCTION
 ENCLOSURE: TOTALLY ENCLOSED
 MOUNTING: FOOT, NEMA "C" FACE
 COOLING: FAN COOLED
 FRAMES 250TC THRU 440TC



DIMENSIONS ARE IN MILLIMETERS- SEE SHEET 1 FOR DIMENSIONS IN INCHES

FRAME	A	D(2)	E	G	H	J	K	EV	O	P	T	AA(B)	AB	AC	AF	BA	BB	BD	BF(8)	BN	MA	AK	
254TC-256TC	317.5	158.8	127.0	19.0	14.2	63.5	---	25.4	336.5	336.5	62.0	-1/4	27.3	222.3	6.3	5.0	120.7	6.4	228.6	172.1	131.9	184.1	215.90
284TC-286TC	349.2	177.8	139.7	19.0	14.2	63.5	---	25.4	374.6	378.0	62.0	-1/4	33.3	254.0	8.1	0.1	120.7	6.4	286.7	172.1	131.9	190.0	226.8
324TC-326TSC	393.7	203.3	158.8	22.4	17.5	69.9	114.3	35.1	423.9	431.8	62.0	0.2	35.8	290.6	10.8	0.1	133.3	6.4	333.2	172.1	131.9	229.4	271.50
364TC-366TSC	431.8	228.6	177.8	22.4	17.5	69.9	98.6	35.1	469.9	495.3	74.7	3	458.7	355.6	136.7	149.4	6.4	330.2	172.1	131.9	229.4	271.50	
404TC-406TSC	482.6	254.0	203.2	28.4	20.6	82.5	117.3	28.7	541.3	571.5	74.7	3	490.5	387.3	136.7	168.1	6.4	333.2	172.1	131.9	229.4	271.50	
444TC-446TSC	533.4	279.4	228.6	28.4	20.6	82.5	133.3	31.7	593.9	641.3	82.5	3	533.9	460.2	165.1	190.5	6.4	425.4	172.1	131.9	229.4	271.50	

FRAME	C	BS	B	ZF	(4)	N	AH	N-(W7)	U(3)	V	SO	LGTH	WEIGHT
254TC	636.5	127.0	304.8	---	209.6	103.1	95.3	101.6	41.27	95.3	9.52	73.2	142
256TC	636.5	127.0	304.8	254.0	---	103.1	95.3	101.6	41.27	95.3	9.52	73.2	147
284TC	697.0	139.7	330.2	---	241.3	127.0	117.3	117.3	47.63	111.3	12.70	82.5	201
286TC	697.0	139.7	330.2	---	241.3	91.9	76.2	82.5	41.27	76.2	9.52	47.8	201
286TSC	661.9	139.7	330.2	279.4	---	127.0	117.3	117.3	47.63	111.3	12.70	82.5	208
324TC	773.2	152.4	374.6	---	266.7	142.7	127.0	133.3	53.97	127.0	12.70	96.6	251
324TSC	735.1	152.4	374.6	---	266.7	104.6	88.9	95.3	47.63	88.9	12.70	50.8	251
326TC	773.2	152.4	374.6	304.8	---	142.7	127.0	133.3	53.97	127.0	12.70	96.6	269
326TSC	735.1	152.4	374.6	304.8	---	104.6	88.9	95.3	47.63	88.9	12.70	50.8	269
364TC	849.4	152.4	381.0	---	285.7	158.8	142.7	149.4	60.33	142.7	15.88	106.0	369
364TSC	809.3	152.4	381.0	---	285.7	104.6	88.9	95.3	47.63	88.9	12.70	50.8	369
366TC	849.4	152.4	381.0	311.1	---	158.8	142.7	149.4	60.33	142.7	15.88	106.0	387
366TSC	809.3	152.4	381.0	311.1	---	104.6	88.9	95.3	47.63	88.9	12.70	50.8	387
404TSC	868.6	174.8	406.4	---	311.1	184.1	168.1	184.1	73.02	177.8	19.05	142.7	546
405TC	973.1	174.8	406.4	349.2	---	190.5	177.8	184.1	73.02	177.8	19.05	142.7	546
405TSC	931.0	174.8	406.4	349.2	---	142.7	127.0	133.3	53.97	127.0	12.70	96.6	546
444TC	1133.3	209.6	482.6	---	368.3	227.1	209.6	215.9	85.72	209.6	22.22	174.8	729
444TSC	1038.4	209.6	482.6	---	368.3	131.8	114.3	120.7	60.33	114.3	15.88	76.2	722
445TC	1133.3	209.6	482.6	419.1	---	227.1	209.6	215.9	85.72	209.6	22.22	174.8	818
445TSC	1038.4	209.6	482.6	419.1	---	131.8	114.3	120.7	60.33	114.3	15.88	76.2	818

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE. CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1.
- (2) "D" VARIES -250TC - 320TC +0, -8
-360TC - 440TC +0, -15
W-4-W-5-W-7, OR C-1 MOUNTING IS SPECIFIED.
- (3) "U" VARIES -41.27 AND LARGER +0.0, -0.3
HP TO 41.27 DIA. +0.00, -0.13
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING. MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .05 T.I.R. UP TO AND INCLUDING 41.27 DIA. AND .08 T.I.R. UP TO 127.00 MILL DIA.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING. FACE RUNOUT AND -250TC - 280TC INCL. 10 MAX. T.I.R.
-320TC - 440TC INCL. 18 MAX. T.I.R.
ECCENTRICITY -320TC - 440TC INCL. 18 MAX. T.I.R.
- (6) "AK" VARIES -250TC - 280TC +0.0, -0.8
-320TC - 440TC +0.0, -1.3
- (7) "N-W" VARIES +0, -6.4
- (8) DIMENSIONS ARE IN INCHES.

FRAME _____ TYPE _____ CERTIFIED FOR _____ RPM _____ PH _____ HZ _____ VOLTS _____

ORDER _____ ITEM _____ HP _____ APPROVED BY _____ DATE _____

RELIANCE SALES ORDER _____

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

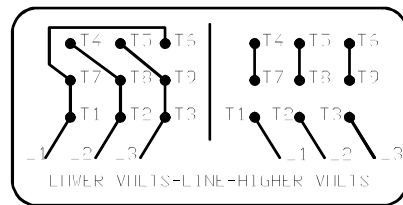
REV. DESC: REMOVING TITLE BLOCK	VERSION: 01	TDR: 00000441900
REV. LTR: A	REVISED: 09:17:32 08/28/2007	BY: RAGRKH
FILE: \RAG\00003\381		
MTL: -		

Baldor • Dodge • Reliance

DIM SHEET 250TC THRU 440TC

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

416820-002

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
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